



Jumping In: Embracing Technology in the Supply Chain

Through a series of emerging technologies workshops that the Canadian Supply Chain Sector Council hosted in early 2018 across Alberta, we learned that many small and medium-sized businesses don't know how or where to start to upgrade the technologies they're using; they're afraid of making the wrong move or jumping in too soon.

In the past, change happened over a longer period, and it was often prudent for businesses to adopt a “wait and see” approach in the face of new technologies, particularly when multiple technologies were competing for market share. It often made sense to wait for a “winner” to emerge, rather than taking the risk of investing early in a technology that might ultimately fail.



This is no longer the case. Studies by the McKinsey Global Institute have concluded that the first-mover advantage for transformative technologies is so profound that late adopters may find that the game has left them behind and that they will be unable to catch up competitively. “Wait and see” is not a viable strategy when technology is changing as rapidly as is currently the case.

This case study looks at one Canadian company that has staked a place as a blockchain educator and consultant. This company has not only embraced technology; it also helps other supply chain companies do the same.

Case Study: TerraHub

Calgary-based TerraHub is a blockchain technology consulting company with three areas of focus: education, consulting and product development.

The Industry Challenge?

The complex and global nature of supply chains means companies are working with suppliers and customers across different countries, with different time zones, different customs requirements and varying levels of security. Risk and uncertainty are inherent in global trade.

The Solution

Blockchain is a “game changer” that tackles that uncertainty, says TerraHub co-founder John Dugdale. He describes blockchain as a continuously updated record of who owns what when. The transparency and traceability it provides mitigates the risk of product tampering and loss, and offers a concise record of the product’s complete path to the consumer.

As a first step in the use of blockchain, especially for small businesses, Dugdale recommends a careful assessment of the process to be “blockchained.” To determine if the technology will be advantageous, start with “low-hanging fruit,” he says. A slow start provides an opportunity to run a process in parallel, with and without the blockchain technology, to evaluate its effectiveness.

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While he advises a slow start, Dugdale does advise starting. Efficiency in the supply chain is critical to ongoing success, and certainly an important goal for any company in a competitive market. Embracing technologies that are designed to increase efficiency can help a company maintain cost competitiveness, increase sales, improve financial performance and consider expansion.

Dugdale does not see technology as a “job killer.” What he says technology use promotes is a shift away from jobs that primarily involve “low-level mundane tasks” to more-strategic work. As an example, he cites

the City of Calgary’s ParkPlus system, which utilizes technology to compare photos taken by photo enforcement vehicles with payment records to determine parking violations. Rather than putting parking violation officers out of work, this system freed them to focus on higher-fee violations, which resulted in more revenue for the city’s coffers. Redeploying employees in new positions can be an opportunity to create value.

“I’ve been in the head-hunting business for 24 years and I’ve been in just technology, and I’ve yet to see technology wipe out a workforce. I’ve seen it make workforces way more efficient, way more productive. Absolutely, there will be change, but sometimes change is good.”
—John Dugdale

Older workers – who seem to be a particular concern in discussions about impacts of technology on employees – possess expertise, says Dugdale, that employers need to hold on to. Creating roles to leverage the wealth of their skills and knowledge is key to retaining the vital information they have to share.